PATENT SPECIFICATION

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COMPLETE SPECIFICATION.

Improvements in the Suspension of Vehicle Axles.

I, RENÉ LUCIEN GUSTAVE LE GRAIN, of 26, Avenue Hoche, Paris, France, a French citizen, Assignee of PAUL HENRI ROBERT SAVARY, of 19, rue de Presbourg, Paris, France, a French citizen, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:—

In vehicles which are provided with springs for example of the cantilever type the rear axle is generally connected with such springs through members which are secured to the ends of the same and constitute axle boxes, an arrangement which possesses various disadvantages in the dismounting of the rear axle.

The present invention has for its object a device for connecting springs for example of the cantilever type and the rear axle which considerably facilitates the dismounting and at the same time provides a substantial connection. In this device the main plate of the spring is appropriately curved at its end so as to fit over the top of the co-operating axle box and terminates in an upwardly curved nose or prong, a stirrup being arranged astride the said plate and supporting the lower part of the axle box, the two arms of this stirrup being connected by a cross member which rests within the upwardly curved nose of the main plate. Such device affords on the one hand the advantage of dismounting the axle from the springs with facility while on the other hand the axis of the wheels is situated in approximately the same horizontal plane as that of the main plate of the springs, thereby reducing the risk of deformation of the latter by the torsional strains on the axle reducing to a minimum the leverage which the said axle exerts upon the main plate

In the accompanying drawings:

Figure 1 is a view, partly in elevation and partly in section of the connecting device according to the invention.

Figure 2 represents a cross section, and Figure 3 is a plan view.

An axle box 11 cylindrical in shape and formed in a single piece is secured to the axle of the wheel. The main plate, limb or blade of a cantilever spring surrounds, with its semi-circular shaped extremity 12, the upper half of the axle box 11. The axis of the wheel is situated, approximately, in the plane of the principal section of the main limb, the latter terminating in an upwardly curved nose or prong 13. The attachment to the box 11 is effected by means of a shackle or stirrup the front end 14 of which is arranged astride the main plate in front of the box 11. The two arms 15 and 16 of the said shackle are suitably curved around the bottom part of the box 11 each being disposed in a groove 17 provided in the wall of the box; the arms 15, 16 are screw-threaded at their outer ends and carry a cross-member or beam 18 which rests in the curved nose 13 of the main plate. The beam 18 is secured in place by the two nuts 19 and 20 screwed upon the arms 15 and 16.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is:—

1. A device for connecting the rear axle with the extremity of a spring, such as, for example, a spring of the cantilever type, wherein the extremity of the main limb or blade of the spring is bent in such a manner as to enclose the upper part of the axle box, and terminates in an upwardly curved nose or prong, a stirrup being arranged astride the said main limb or blade and supporting the lower part of the axle box, the two arms of this stirrup being connected by a cross-member which rests within the upwardly curved nose of the main limb.

2. A connecting device substantially as described and as illustrated in the drawings.

Dated this 20th day of February, 1922.

W. H. BECK & Co.,
Chartered Patent Agents,
115, Cannon Street, London, E.C. 4.

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[Price 1/-]

[This Drawing is a reproduction of the Original on a reduced scale.]

Fig. 1.

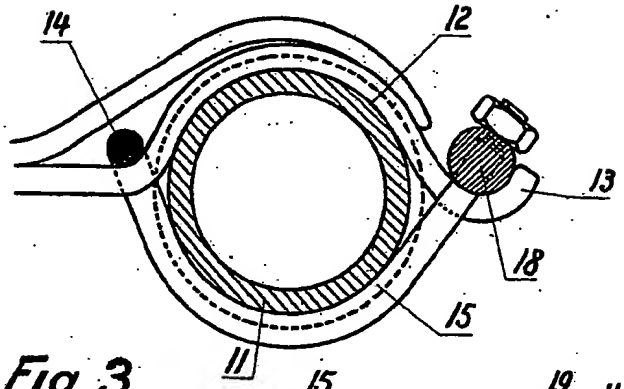


Fig. 2.

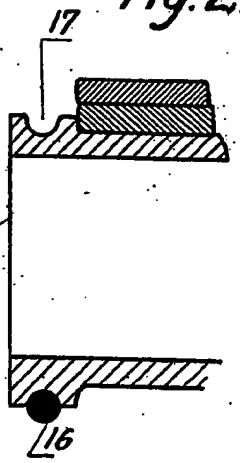
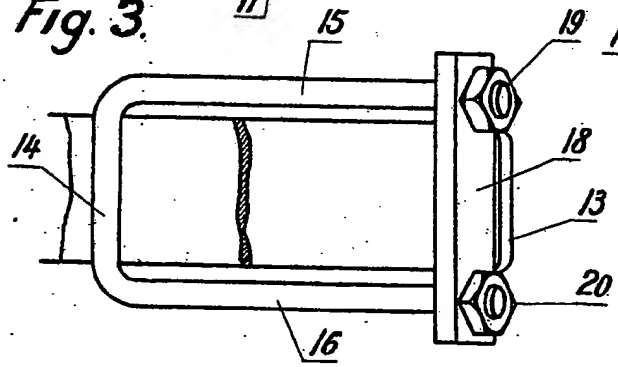


Fig. 3.



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